CASTLEMAINE NATURALIST

FEBRUARY 1981

54

Flowers of the Castlemaine District

by Rita Mills

DILLWYNIA SERICEA

Showy or Silky Parrot Pea

(flowering : Aug - Oct)

This shrub is fairly varied. On private land in North Castlemaine there is a for form which grows only 30 cm high and has long (3 - 4 cm) leaves. They are typically narrow, minutely hairy, and channelled above as are the usual forms.

Usually the shrubs are about 60 cm high although one of about 1.5 m in height probably succumbed to the recent bush fires.

The flowers are usually yellow and red although they are sometimes apricot in hue. They have no stipules, which helps to distinguish them from the Bush - Peas (Pultenea spp).

President : Mr G. Sitch Goldfields Nursery Muckleford Ph. 72 2734

Secretary : Mr S. Bruton 23 View St Castlemaine 72 3050

Treasurer: Mr L. Bransgrove 113 Lyttleton St C'mne 72 2772

Newsletter: Mr G. Broadway 7 Wheeler St C'mne 72 2513

Monthly meetings are held on the second Friday of each month (except January), at 8 p.m. in the Castlemaine Education Centre (SEC buildings, Mostyn Street, Castlemaine).

Visitors and prospective members are invited to attend the club's sessions.

CLUB CALENDAR

Friday : Feb. 13. Guest speaker, Dr R. Sisson will give a talk on his journey through Nepal.

Saturday : Feb 14. Outing to Trentham Falls. Leader, Mr S. Bruton

March 7,8,9. Campout.

See details below and map on back page showing proposed venues. Please keep this for future reference.

CASTLEMAINE FIELD NATURALISTS CLUB

Victorian Field Naturalists Clubs Association and the Western Victorian Field Naturalists Clubs Association Combined campout at Castlemaine, March 7-8-9, 1981.

Provisional Excursion Arrangements Meet at Car Park, Downes St, Botanic Gardens

Saturday 7th March

Morning Excursions- 9.30 p.m. For the Early arrivals
- sewerage Ponds - birds; item 1 on the map.
- a walk in Kalimna Park - general. Item 3 on map.

Afternoon Excursions 1.30 p.m.

- Historical tour of Castlemaine- conducted by Historical Society
- A tour of Fryerstown/Vaughan-historical/geological/general
- Maldon/Tarrengower - historical/geological/general

Sunday 8th March

Morning Excursions 9.30 a.m.

- Local geology
- Expedition Pass - birds and general
- The Fryers Ridge - botany (if Spring is 6 months early !)

Afternoon excursions 1.30 a.m.

- Historical tour of Castlemaine - a repeat of Saturday's excursion
- Maldon/Mt Tarrengower - a repeat of Saturdays excursion
- Expedition pass - a repeat of the mornings excursion
- Mt Alexander and the Koala Park.

Monday 9th March

Morning Excursions 9.30 a.m.

Expedition Pass - a repeat of Sunday's excursions
Mt Alexander and Koala Park - a repeat of Sunday's excursion
Local Geology

Afternoon excursions 1.30 p.m. These will be short (in time) e.g. Mt Franklin to the South, possibly Mt Tarrengower and Pells Swamp to the West.

PLEASE NOTE: EXCURSIONS ACTUALLY HELD COULD CHANGE, DEPENDING ON WEATHER CONDITIONS AND NUMBERS ATTENDING, AND DEMAND.

Evening events Evening events will be held in the Uniting Church Hall, Campbell St, Castlemaine. (Almost opposite the Total Service Station in Barker St)

Saturday March 7th

6.30 General Business meeting of W.V.F.N.C.A.
8.00 Launching of Mr C. Beaugleholes book, "The Distribution and Conservation of Vascular Plants of the Alpine Area, Victoria" by Mr Frank Robbins.
8.15 Evening program
- Plant propagation - Geoff Sitch
- Birds of Central Vic - arranged by George Broadway and Stan Bruton.

Sunday March 8th

6.30 Annual Meeting of V.F.N.C.A.
8.00 Evening Program - aspects of Castlemaine District - presented by members of Castlemaine F.N.C.

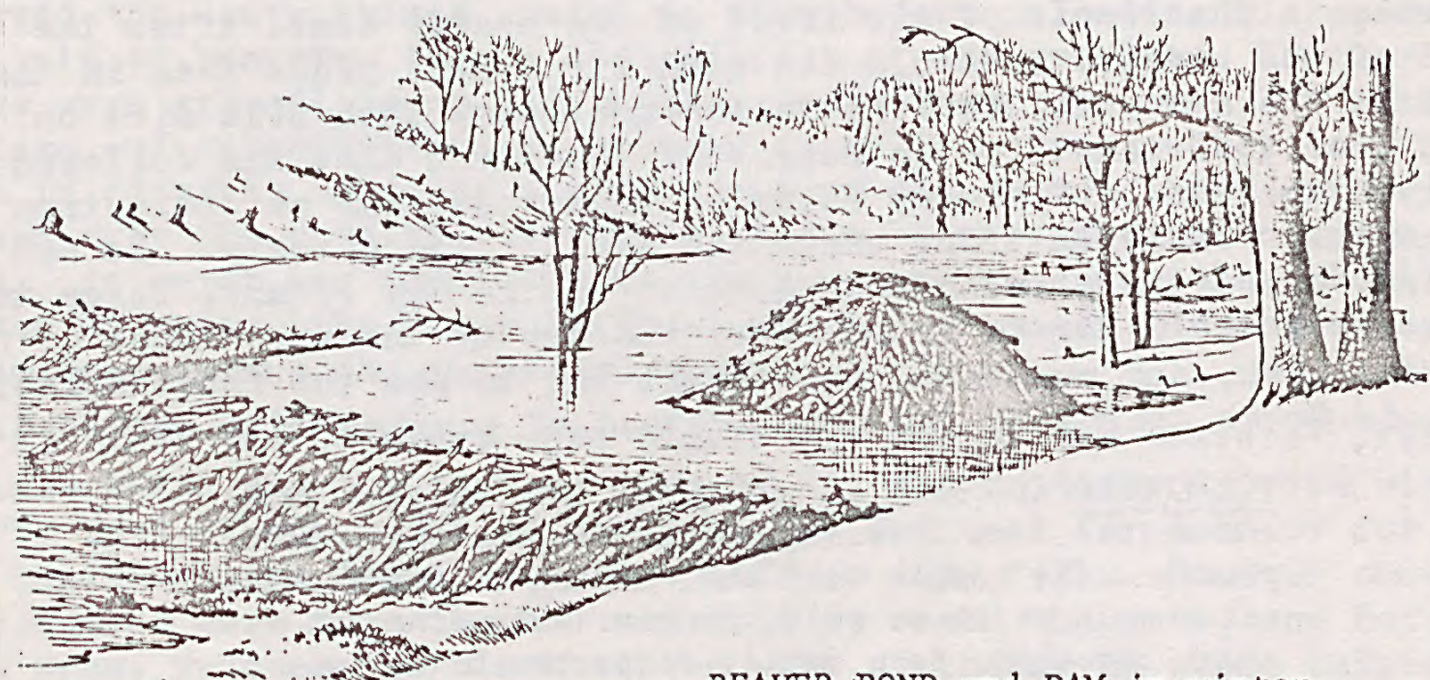
Book report

by G. Broadway

Three Against The Wilderness is a Canadian paperback and as such is probably not available in Australia, which is rather a pity, as I believe it would be of considerable interest to conservationists. I read it originally because the events described took place not very far from the part of British Columbia in which my family and I lived in 1975. It is the author, Eric Collier's account of how he, with his part-Indian wife and baby son set out to live in a remote part of B.C. and to earn a living by trapping.

When Eric Collier first saw Meldrum Creek in 1922 it was not very inviting. There was a bushfire raging, such as was not uncommon during a period when ranchers thought little of setting fire to a grassy clearing in order to encourage the growth of fresh green fodder for their stock. If the fire escaped and burnt some of the surrounding forest it mattered little; after all one commodity which was plentiful in B.C. at that time was virgin forest.

However the fire was not the only reason why the Meldrum Creek area did not look particularly attractive on that summer day of 1922. During the previous century there had been many beavers along Meldrum Ck., its tributaries and its lakes, but when Eric Collier first came there had been no beavers for more than 50 years. Only the remains of their dams and lodges showed that they were once plentiful until white men came into the area, greedy for furs. White men who blew holes in the beaver dams and set their traps, knowing that a beaver will immediately set about repairing the damage. The white men also offered the Indians tempting prices for beaver furs so that it was not long before any beaver which had escaped the white trappers was despatched by the Indians.



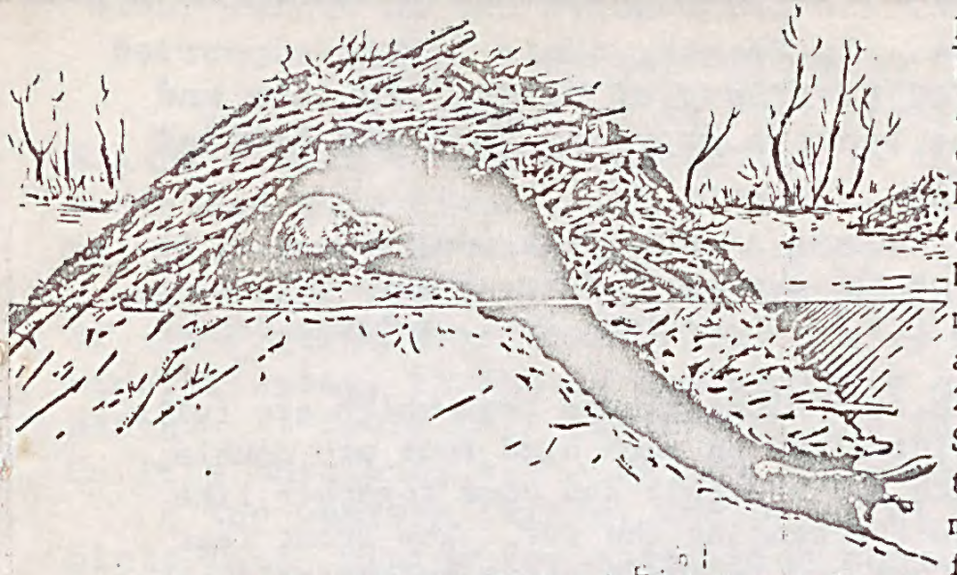
BEAVER POND and DAM in winter.

Downstream the soil of the flats by the creek was fertile but in this dry part of B.C. irrigation was necessary to grow sufficient fodder to feed the cattle during the long period of Winter snow when they could not fend for themselves. For a time all was well, but then the ranchers began to find that there was less and less water flowing during the Summer months after the rush of spring snow melt had passed. In fact during the Summer, the stream dwindled to a chain of stagnant muddy waterholes in which cattle would become bogged in trying to obtain a drink. It meant easy picking for the wolves and coyotes. In an attempt to obtain more water, some ranchers blew up the remaining beaver dams and breached some of the smaller lakes, thus producing swampy marshes where once had been beaver ponds. But all they succeeded in doing was to produce a stream which was but a trickle, discoloured and smelly.

It was not generally realised that the stream flow failed from the time that the last beavers disappeared from the stream basin. Collier however suspected this, and inspired by his wife's ancient Indian grandmother, he resolved that one day, without knowing how, he would reintroduce beavers to Meldrum Creek. He reasoned that if the beaver dams were rebuilt or repaired, then hundreds of acres of dried up beaver meadow, and swamp would again be flooded. This would create the right conditions for birds and animals such as muskrats which would in turn attract other more desirable furbearers such as mink and ermine.

First he sought permission from the Water Commission - but was refused as his scheme was considered to be useless and likely to jeopardise supplies of water to the ranchers downstream. His next move then was to seek the approval of the largest landholder who was also in possession of the primary water rights. Luckily this rancher was fairly enlightened and gave the necessary approval, provided there was no interruption to his water supply. So Collier, with barrow and axe, proceeded to the repair of the first of the beaver dams. After the method of the beavers he would cut down fir trees, place them in the breach in the dam wall, foliage facing upstream, then pile dirt on top of them. Fortunately the repair of the first dams was followed shortly by particularly heavy rains so that there was no diminution of water supply for irrigation, while the dams filled quickly. It was not long before aquatic plants, long dormant in the dry ground, began to appear above the water to be followed shortly by the appearance of mallards, mink, and muskrats. One thrill was to see the first flight of Canada Geese alight on the pond instead of passing high overhead.

THE LODGES are made up mainly of intertangled twigs and sticks. As freezing weather begins the beaver plasters the lodges with mud, making a concrete-like outer coat which no wolf, lynx or wolverine can break through. Each family compartment has two openings, both under water, one being used as an entrance, the other for an exit. There are three or four kits to each litter.



Cross-section of beaver lodge. Usually there is one lodge per colony.

MANY BEAVER HOUSES are merely burrows in a stream bank; others are lodges built in the beaver pond or on an adjacent shore. Most lodges are some 15 feet in diameter and about five or six feet high, with a single living compartment four or five feet in diameter and about two feet high. Lodges 27 feet in diameter have been found Some of the larger ones have more than one apartment with each apartment being occupied by a separate family group.

However it was to be ten years from the time the Colliers moved to Meldrum Ck before the B.C. Game Department took note of what was happening. During this time the family had little but what they could obtain or improvise from the surroundings forest. Collier recounts stories of encounters with coyotes, wolves, bears and blizzards, Moose and deer. How a Winters supply of grease was obtained by enticing a bear from its den in early Winter by sending in his wife with a blazing torch. Of a near fatal encounter with a cantankerous old bull moose, of hunting coyote through the Winter snow in order to obtain a few pelts to exchange for much needed supplies from the trading post, and the difficulties of travelling the fifty or so miles to the trading post through the deep snows of Winter.

Eventually however there came the day when an unusual noise was heard approaching the cabin. This turned out to be a motor vehicle laboriously making its way to the cabin through the dense forest along the rough trail which served the Colliers. When the vehicle at last arrived the weary driver wasted no time before unloading his passengers-two pair of beavers from a distant part of the province. However his fears were groundless as the beavers seemed none the worse for their capture and subsequent rough journey to Meldrum Creek. They lost no time in adapting to their new home and in due course their offspring spread over the watershed, rebuilding old beaver dams and creating new ones. As water was impounded in the many beaver dams, the subsoil soaked up water like a sponge thus ensuring a steady flow of water downstream during the summer months.

At first the Colliers were puzzled by one of the beavers' first actions which was the cutting down of all the Cottonwood trees within thirty feet of the water of their ponds. Not used for food or for dam building, the trees were just left as they fell. However once the Cottonwoods were gone the sun was able to reach the soil, and before long peas, vetches and blackberries were springing up where before the soil was more or less bare. These plants in turn provided meals for bear, grouse, deer, geese and ducks. In due course a number of

deciduous shrubs grew in place of the cottonwoods and in Winter these provided fodder for hungry moose. In Summer, their leaves supported a population of insects which fed a variety of birds. In this and other ways the activities of the beavers provided food and habitat for a variety of other wild life.

THE BEAVER is the largest rodent in North America with adults ranging between 30 and 60 pounds in weight on the average, although some will weigh as much as 100 pounds. Including its 12 to 13 inch tail, a large beaver may be four feet long.
The hind feet are very large, with five blunt-clawed toes which are fully webbed for swimming. The two inside claws on each hind foot are double, with upper and lower sections which are moveable and come together like tiny pliers. These claws are used for combing the fur. The front feet are small, without webs, and the toes end in sharp claws suited to digging. The front feet are used almost like human hands, and with them the beaver can hold and carry sticks, stones, mud and perform a variety of quite complex construction tasks. Only the hind feet are used to propel the animal through the water, occasionally with some aid from the tail. In the water a beaver is a strong and graceful swimmer, both underwater and on the surface.

Its sense of smell is acute with the nostrils being small and capable of being closed when swimming. Hearing is also excellent, and the ears are valvular, becoming tightly closed when under water.

THE BEAVER'S LONG, sharp, strong incisors consist of material that is harder on the outside than on the inside. Consequently, as the teeth wear away with constant gnawing, the outer tips of the incisors remain chisel-sharp. With them the beaver is able to fell very large trees, one which is claimed as the record being 46 inches across!
The lips can be closed behind the incisors, permitting the beaver to gnaw under water.
The fur is dense and consists of very fine under-fur about three-quarters of an inch thick, and an outer layer of heavy guard hairs about two and one-half inches long.

MANY LARGE REGIONS in British Columbia were without beaver during most of the first half of this century. Sensible conservation programmes--notably a tagging system which limited the catch---together with the stabilizing effect of the Registered Trapline System, helped in saving the beaver. The support and cooperation of registered trappers has been outstanding in the province.
Recently there has been a tremendous increase in the numbers of beavers. In some areas today the problem is not how to protect the beaver, but to harvest enough of them to prevent over-population and starvation. Tree-cutting and dam-building by beaver have resulted in many serious problems. Beaver work has caused the washing out of roads and railroad rights-of-way, the flooding of farm meadows and similar damage.

The multitudes of beaver on the headwaters of rivers and streams stabil ize water flows, prevent stream bed erosion, creat trout ponds and improve habitat for many forms o wildlife.

Some Recommendations to the L.C.C.

(As submitted by Past President Ray Bradfield)

Editor's note : Ray's submission to the Land Conservation Council contained some items which I felt would be of interest to all members, so, with Ray's permission, we publish some extracts.

The Stony Creek Mineral Spring would probably be within the limits of the Fryers Ridge State Park. A very fine, permanent flowing spring mineral water, it should certainly be afforded protection from alienation. It could be a feature of the future state park, being situated in fine bushland, although not fully accessible at present.

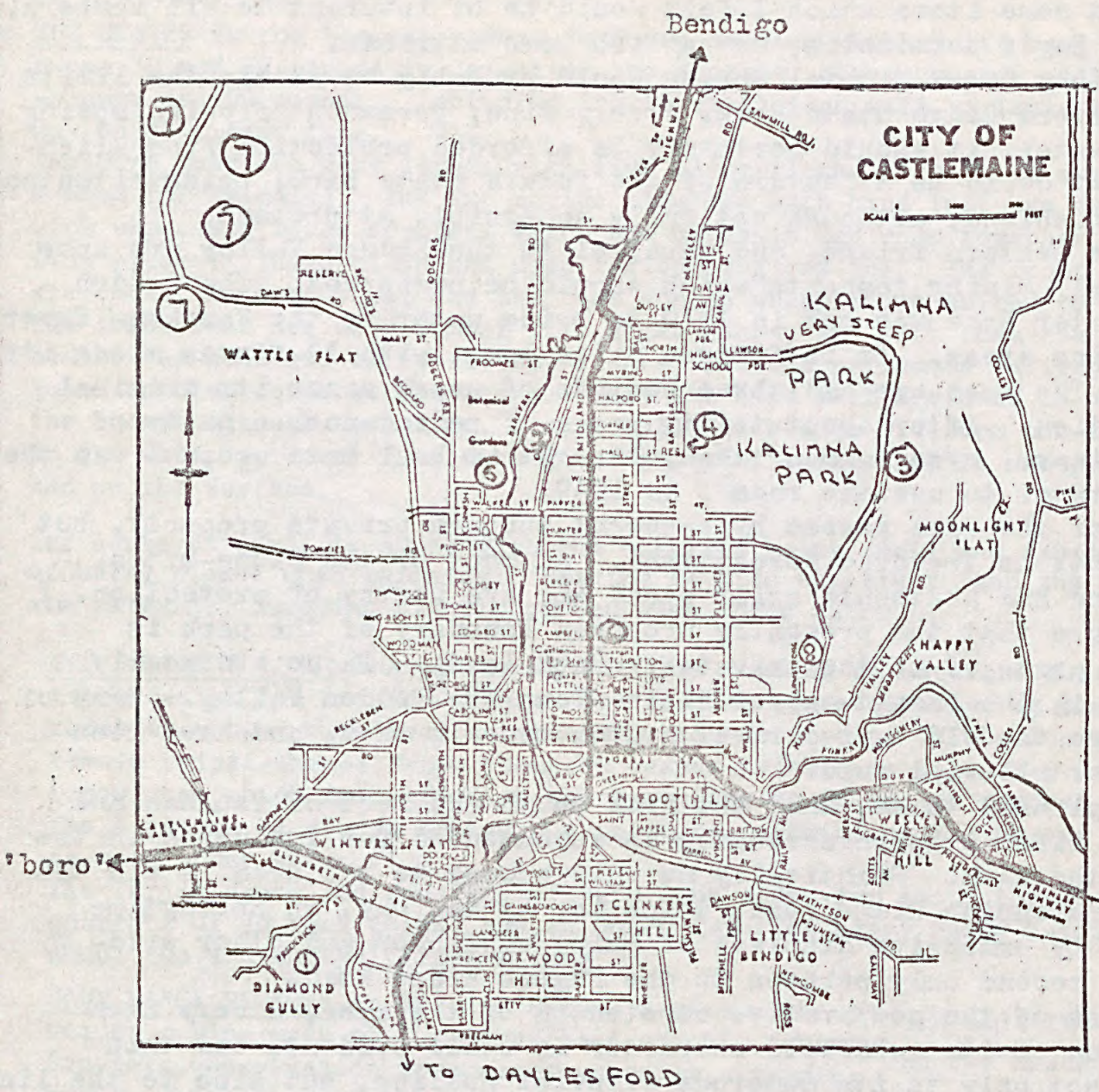
On the western fringe, and parallel to the Loddon Valley are some historical mining remnants, which should be preserved. The Loddon - Fryers Water Race was cut in 1870 to bring water to the Vaughan- Fryer gold-mining areas. It is fifteen miles long, with 13 flumes along its course. The race has had three periods of usage since its original construction. After about thirty years of redundance, a party of sluice miners, myself among them, brought it back into use, I was the last operator to use the race , in 1959.

Much of the race passes by easement through private property, but large sections traverse forest land. At most of the flume-sites, the piping and abutments still stand and are worthy of protection. I am not sure that the presently proposed boundary of the park is extended westward to the privately owned lands. These are mostly confined to the basalt-capped hills along the Loddon Valley. Many of these have the old buried river system beneath them, and have been worked for alluvial gold.

I am pleased to see that the area south and west of Vaughan and Glenluce Mineral Springs reserve is recommended for inclusion in the area of the park. Practically the only access to the area is via the Vaughan-Porcupine Ridge road, which is, by the way, in Springtime bordered by extensive displays of Fairy Waxflower and other wild-flowers, second only perhaps to the Fryers Ridge Road.

Because of the comparative remoteness of the area, a very high proportion of its goldfield character is still evident, and this applies not only to its numerous alluvial gullies, but also to the lin of quartz reef workings, which are almost continuous, from Vaughan to the Porcupine Ridge. Mostly shallow reef workings, some of these shows were very rich indeed.

I would say that, because of the varied facets of attraction which it shows, few areas within my experience afford so much for the interested observer, be his(her) interest historical, field naturalist, fossiker, or just someone out for a bush ramble.



1. Sewerage ponds
2. Car Park next to Botanic Gardens, Downs St
3. Kalimna Park - reach by Lyttleton St or Hunter St.
4. Kaweka Wildflower reserve. Reach by Turner St.
5. Caravan Park
6. Uniting Church Hall
7. Wattle Flat - forest
8. Kalimna Point -nature trail